

## Reintervention for the trifecta aortic bioprosthesis: large single-centre series

A. Fard<sup>1</sup>, N. Al-Attar<sup>2</sup>

<sup>1</sup>University of Glasgow, Glasgow, United Kingdom; <sup>2</sup>Golden Jubilee National Hospital, Glasgow, United Kingdom

**Funding Acknowledgement:** Type of funding sources: None.

**Introduction:** Aortic valve replacement with the Trifecta aortic bioprosthesis has reported favourable haemodynamic performance. However, several reports of structural valve deterioration have raised concerns of design risks and its long-term durability.

**Purpose:** We conducted this study to assess reintervention and outcomes in a large single-centre cohort of 944 patients receiving the Trifecta valve over a 10-year period.

**Methods:** Consecutive patients undergoing aortic valve replacement with the Trifecta valve between October 2011 and October 2020 in our centre were included in this study. Perioperative patient and operative characteristics were prospectively recorded in an independent database. Reintervention was recorded as a surrogate for structural valve deterioration, and survival data was analysed.

**Results:** A total of 944 patient (mean age 72.82 years  $\pm$  8.13, range 28–

91, 58% male) underwent aortic valve replacement with the Trifecta valve in our centre between October 2011 and October 2020. At 10-years, 1.4% of patients required a redo operation for aortic valve replacement, giving an overall freedom reintervention of 98.6%, with a 99.3% and 99.4% freedom from reintervention due to structural valve deterioration and infection, respectively. The mean time to all-cause reintervention was 48.87 months, and the mean time to reintervention due to SVD was 68.87 months. Patients that did not require reintervention had a 97.74% freedom from mortality and those that underwent reintervention had a freedom from mortality of 84.62% with a median survival of 69-days.

**Conclusions:** In a large single-centre cohort, the Trifecta aortic bioprosthesis was safe with a 1.4% all-cause reintervention rate and a 0.7% reintervention rate for structural valve deterioration at 10-years.